# In the Curriculum Sara Kajder and Janet A. Swenson Subject: Digital images, digital cameras and video Audience: Administrators, technology coordinators, technology integration specialists, technology facilitators, teacher educators, library media specialists, teachers Standards: NETS•T II; NETS•S 3-6 (http://www.iste.org/standards/) Learning & Leading with Technology

# Digital Images in the Language Arts Classroom

ecent work in middle and high school classrooms throughout the past year suggests two key roles in which students can use digital images in the language arts classroom: as readers and as writers. These emerging capabilities can allow students and teachers to envision, understand, and communicate meaning.

Here we offer three brief illustrations of ways in which digital images are being used in language arts classrooms then an in-depth look at one specific strategy: digital storytelling.

#### Classroom Uses of Images

Digital images provide ways for student readers and writers to engage with both visual and print texts. The following is a list of possible general classroom uses and applications.

Digital Images Can Help Readers Envision Text. Good readers often visualize the action of a story, creating a mental movie of images evoked by the story. Struggling readers often lack this skill. We addressed this by developing a visual think aloud, challenging students to reinvent a classroom reading strategy using video editing tools to develop sequences of images organized along digital time lines.

In a traditional think aloud, students read printed text orally. They pause to insert their questions, connections, applied reading strategies, and observations associated with the text they have read. Digital video editing systems enable students to select a series of still images that illustrate the story. In a visual think aloud, students select pictures that represent the mental images the printed text evokes

as they read it. Most of the students with whom we have worked have created their own digital pictures, either by scanning or photographing original art work or by using digital cameras to take photographs.

Once the sequence of digitized images has been developed, students narrate the story on one audio track (the purple line in Figure 1, p. 19) as the images are displayed through a program such as iMovie. Students then record a second audio track (the orange line) as a voice-over that allows them to insert the questions, connections, and ideas stimulated by the story.

The reading process is largely invisible. Working with a visual think aloud can make that process visible, through the time line depicting the series of images paired with accompanying text that evokes the images in students' minds. Our student readers demonstrated increased comprehension following the use of this strategy, because of their increased understanding of how reading strategies work to aid a reader in work with rich literary texts as well as the close work in developing a supported visualization.

Digital Images Offer a Unique Bridge to Writing. Just as digital images provide an entry point for readers, they can also provide an entry point for beginning writers as they also create their own texts—narrative, persuasive, and expository. Everyone has a story to tell—it is a unique aspect of the human condition.

Filmmaker Ken Burns popularized the technique of combining still images with short video clips and a narrated voice-over to create documentaries that bring history to life. Joe Lambert developed a variant of this technique at the Center for Digital Storytelling in Berkeley, California. The method he developed with the center's co-founder, Dana Atchley, allows everyday citizens to create similar documentaries of their own lives. These short digital stories are used to illustrate a key facet or philosophy of their lives in 90 seconds to three minutes.

The emerging art of digital storytelling allows students to combine digital images with an accompanying oral narration to tell their own stories. Effective expression in this medium can be used as a bridge to writing. In some cases, the written script may precede the oral narrative, in other instances the oral expression may be translated to written form.

## Digital Images Allow Students to Visually Communicate Meaning.

In the first two examples, digital images serve as scaffolding to make reading and writing more accessible to students. However, there is justification for working in this medium in its own right. Ultimately, English class is not really about printed characters on a sheet of paper, but about communication.

Until now, still and moving images have constituted a "read-only" medium. Digital video editing tools now allow us to read *and* write in this format. The emergence of ubiquitous digital image editing technologies has made it possible to incorporate new and powerful communication tools into our language arts classes. For example, students have used image editing tools such as Photoshop Elements

to create photo collages representing their understanding of a piece of print text. In secondary classrooms, these have evolved into *open minds*, photo collages that graphically represent a character's thoughts at a given point in the text.

This offers teachers an opportunity to take advantage of the unique capacity of the tool by fusing image and word. The content created communicates at multiple levels, engaging students on the same terms as media experienced outside the classroom.

### Digital Storytelling in the Classroom

Stories abound in our classrooms. They allow students to see themselves in their work, participate within literacy communities and, often, define themselves as readers and writers. Digital Storytelling allows a writer to convey personal narrative through the use of images, video, and sound. Students work as readers and writers but also as screenwriters, artists, designers, and directors.

For the past year, we have been adapting the techniques developed at the Center for Digital Storytelling for use in middle and high school English classrooms. We held a Digital Storytelling Teacher Institute in spring 2003 for 15 teachers in the Central Virginia area who were participants in the Shenandoah Valley Technology Consortium. This initial cadre has grown to include another dozen over the course of the past school year.

Students in a number of these classrooms created short digital stories. The stories were personal narratives that responded to a significant

question of the students' choosing. The project took two weeks of instructional time and used a class set of two to four digital cameras. The resulting digital stories were rich and compelling, and they provided students with a greater understanding of what it meant to work as a writer.

For example, we worked with a Grade 11 class in Montgomery County, Maryland, to create original digital stories in response to the prompt: "What does it mean to be independent?"

Effective digital stories pursue a genuine question and offer a payoff, some element that reveals why it's important to explore this story at this particular time. One student, Rochelle, created a digital story that spoke to and about her mother. Their relationship was strained and had led to Rochelle's rebellion in the form of many body piercings and detentions. Rochelle was a student with tremendous capacity. She just did not see where to begin as a writer ... or as an adolescent.

In her three-minute movie, Rochelle's voice told the story of her mother riding her bike down the dirt paths that were the initial construction sites for I-270. The images rotated from black-and-white shots of her mother at age 15 to those of a grinning Rochelle in brilliant color, riding her bike with her mother trailing close behind. Taking full advantage of images that spoke, she balanced the use of her voice with moments where silence allowed the image to communicate. She closed with the words, "I would have liked to have known the girl with the wind in her hair."



Figure 1: iMovie time line from a student's visual think aloud

## The Nuts and Bolts of Building a Digital Story

The process of digital storytelling incorporates the four phases of acquire, analyze, create, and communicate, embedded in the larger tasks described below.

Students shared and discussed family stories, books from their childhood (though only 3 of 37 students had actual "artifacts" to share), and stories about their experiences in school. Our teaching was driven by the idea that all literature—the stories we read and those we tell-provide us with a way to imagine human potential. Students were sharing their own stories and balancing them against the authors we read (Frank McCourt, Anne Lamott, Alice Walker, Maxine Hong Kingston, Gary Soto, and others) in an attempt to validate and understand their experiences. Language is a way of sorting out one's thoughts about things, and story paired with digital images provided an entrance into writing for those students who wrestled with putting the right words together to communicate exactly what they wanted to express.

In working with story and personal narrative, these formerly unmotivated readers dove in to the bookcases and read actively in the library after school. Equipped with strategies we had modeled and explored in class, students struggled to find entrances but did not quit. As one student, Lashawna, put it, "writing that's real and that matters" challenged student comprehension in the sense that comprehension means that readers think not only about what they are reading but what they are learning. Students read not to glean what the color green meant in a text but what significance that story had to their own understanding and experience.

Choosing What to Say. Students worked through several stages of construction after reading several memoirs and participating in full-class



discussion on the differences between personal narrative and memoir. Students understood that the personal narrative needed to be a window into a moment, a self-contained story set in one particular place and time.

They chose to tell rich stories that were about discovery and understanding. Dahabo, an immigrant from Somalia, wrote the story of the first day she wore pants, explaining what freedom and America meant to her. Niko wrote about his initial perceptions of the American job market, wanting security and possibility, or, to use his words, "the ceiling of America and the floor of Greece, my family's home."

Each student submitted a draft of between one and one-and-a-half pages, double-spaced. The length was short but required packed, precise language and provided an entrance for struggling writers who were intimidated by the blank page. The trick was to develop their own voice while exercising economy, one of the key elements of an effective digital story. Some students began by arranging a sequence of images

and building a script from what they saw in story that the images worked together to tell.

Acquiring Images. Students' digital stories were built from an assortment of still images captured using a class set of two to four digital cameras or scanned from family photographs brought from home. This was a quick process, as most student digital stories used fewer than 15 images.

Analyzing and Storyboarding. Students were required to map on paper each image, technique, and element of their story by constructing a storyboard. This visual story had two dimensions: chronology (what happens and when) and interaction (how audio information interacts with the images). Using a template supplied by the Center for Digital Storytelling, students arranged and rearranged images that were listed on sticky notes. The storyboard also required the writer to consider how effects, transitions, and sound would be sequenced.

*Revision.* Storyboarding required students to examine their scripts closely, and all needed some degree of rewrit-

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Language Arts continued from page 21. ing and revision. Revision is just that, a revision or a re-seeing of the work. We set up revision stations around the classroom to provide prompts and writing exercises. Revision involves changing the meaning, content, structure of style or a piece of writing rather than the more surface changes that editing demands. To that end, students' work centered on bringing voice to their pieces or on helping the events to come alive for the viewer-reader. Each student completed at least two revision exercises, providing different entrances into their writing and more fuel for our daily conferences.

Create and Construct. To build their digital stories, students needed to import or digitize their photographs, add transitions between images, and special effects. They then recorded a narration in their own voice and added a sound track with accompanying music. The completed project was saved to a CD. Students had limited time using the six classroom computers but were able to come in after or before school, use computers in the media center, or work from home or the community library. Because several students had better tools at home, many built from home, bringing in work to meet the teacher's checkpoints on their progress.

Central to the construction was a rule that emphasized content over presentation, setting the balance at 80% content and 20% effect. Without the rule, students were caught up in zooms, pans, and special effects that showed knowledge of the digital editing tool but little control of the story. By putting the story first, students were selective about effects, choosing those that advanced the story as opposed to those that mimicked effects seen in films or television.

Communicate through Screening. At the close of our work, we screened the finished products, complete with

popcorn and student-written responses. Shared responses celebrated students' attempts to reflectively add meaning to past events and often requested more detail. Others explored technical suggestions for both the presentation and the content, referring to cinematic terms or texts we had read.

#### **Ending Points**

What we have discovered in a short time of working with digital cameras and digital images in the language arts classroom is that effective teaching practices paired with powerful technologies provide student readers and writers with unique experiences to transform their understanding of events, printed texts, words, and images. Literacy demands that students communicate and make meaning from a variety of texts, but also that they use that literacy in terms of how they live their lives. Images allow students to see what they think they know, connect the new to the known, and express their understanding in ways that are visual, auditory, scholarly, and powerful.

The strategies discussed here are the beginnings of what we anticipate as a much longer list of options that will develop into best practices for leading students visually and verbally into close, mindful interactions with text. They are simultaneously a glimpse of the possibilities, and an invitation for you to examine, invent, reinvent, and, ultimately, join in the conversation.



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